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INORGANIC COMPONENTS OF INDIGENOUS TOOTHPASTES PRODUCED BY OJSC «MODUM» AND TOOTHPASTES PRODUCED COLGATE-PALMOLIVE COMPANY

Toothpastes are efficient and economical means for preventing and treatment of mouth cavity. Using of toothpastes appears to be regular and doesn't require the involvement of medical staff. Hygienic and prophylactic toothpastes are widely used means of oral care, so their consumer properties play the main role: the color of a toothpaste, its taste, consistency and the content of trace elements — all these criteria are important.

We made a research to learn how young people usually make a choice of a toothpaste: 34% of testees look at the composition and company's promises 16% - pay attention to color and odor of a toothpaste. Some students pay special attention to companies which are ecologically-friendly and do not conduct any tests on animals. The quality of toothpastes is determined by:

- 1. Microbiological indicators: the amount of microorganisms CFU/1 g must be less than 1×10^2
 - 2. The content of fluorine must be less than 1500 mg/kg.
 - 3. The fraction of heavy metals is less than 0.01 %.
 - 4. pH 7.5-10.5.
 - 5. Organoleptic properties.

The main constituents of toothpastes are abrasive binding components, surfactants, also it could have substances for oral care. There are variant additives: fluorine, anti-inflammatory substances, vitamins, calcium chloride (for reducing the sensitivity).

The results of our research show that: 43% of Belarusian students use «32 pearls», 8% use «WÜNDERDENT», 10% use «SILVER DENT» and the others use some other kinds of toothpastes, but 52 % foreign students use toothpaste «Colgate».

Analyzing the composition of toothpastes «32 pearls», produced by OJSC «Modum» and toothpaste «Colgate» shows that it contains the great amount of inorganic components, which give significant therapeutical effect. It's necessary to highlight: pentacal triophosphate (prevents teeth plaque), silicon dioxide hydrate (cleans and polishes teeth), silicon dioxide (an abrasive, cleans and polishes teeth), sodium fluoride (strengthen tooth enamel, prevents caries).

Well-balanced composition of toothpaste could only be made with considering of all components, because many of them could have double effect and inreact with other components.